



Denali Commission Award 1599

Community Kelp Seed Nursery in Seward, Alaska

Project Narrative Report

Reporting Period: June 18, 2020 - September 30, 2020

Project Status:

The Native Conservancy Community Kelp Seed Nursery (CKSN) project has been developed and deployed to grow kelp seed at the Alutiiq Pride Shellfish Hatchery (APSH) in Seward, Alaska. As of September 30, 2020 the CKSN nursery neared completion and with the help of biologist Annie Raymond, preparations were underway for transferring aquaria of the seeded line to the stand-alone unit. Adjustments to the CKSN unit will continue to be made into early October. In addition, Native Conservancy has transferred the position of project point person from Tessa Diem to Tesia Bobrycki for the remainder of the project all the way through the kelp seed outplanting process.

Accomplishments:

Accomplishments include the completion of initial build out of the portable seed nursery, acquisition and inoculation of wild seed for three species of kelp including *Alaria Marginata*, *Nerocystis*, and *Saccharina Latissima*, (Ribbon, Bull and Sugar), transfer of the nursery set up and aquaria to the nursery unit itself. Full operation of the stand-alone seed nursery is set to begin early October. Key milestones were met with the delivery of the conex unit, insulation and build out preparation of the nursery and further construction including plumbing, HVAC and electrical. Flooring was added to the unit to increase waterproofing and durability. Shelving and cultivation supplies were sourced and set up initially in the APSH facility and are ready to be transferred to the CKSN unit. Finally, wild kelp mapping and sorus collection of *Alaria Marginata*, *Nerocystis*, and *Saccharina Latissima* were successfully completed throughout Prince William Sound by Native Conservancy.

Project Schedule:

The Community Kelp Seed Nursery project is on schedule despite some initial equipment delivery delays, especially with resource sourcing coming for the buildout and operations. Looking forward after the September 30 project status, next steps include transferring the 10 seed tanks (each with 8 100-150ft spools of kelp seed) from the APSH facility to the stand-alone nursery and continuing operations of the seed cultivation in the new CKSN unit. In addition, Native Conservancy is leading the “lessons learned” narrative that is being compiled and further developed into the Community Kelp Seed Nursery Best Practices Manual for operation and application of a portable nursery unit.

Project Budget:

The project is meeting expectations in categories of personnel, equipment, and contractors. Due to continuing Covid 19 impacts, the cost of travel was underestimated and Native Conservancy will be covering additional costs accrued, unless able to lower costs in other categories of the operation.



Actions to Address Project Problems:

Challenges faced included equipment resource sourcing in Alaska during COVID which caused delays in the build out of the nursery. Actions were taken to begin the seed cultivation inside the Alutiiq Pride Shellfish Hatchery (APSH) facilities with plans to transfer operations to the CKSN unit once it was ready. This turned out to be a benefit as the Community Kelp Seed Nursery team as they were able to learn the nursery operations alongside APSH's experienced staff of mariculture experts before shifting operations to the stand alone nursery. This also allowed for the seed nursery design plans to be augmented in response to lessons learned in the APSH facility that will improve overall CKSN function.